

1. A data handling device capable of operating in a system in which two or more devices are connected by a data bus for the transmission of communications therebetween, the data bus having two or more data lines and the device having:

two or more data bus connectors, each for connection to a respective data line of the data bus;

an identity acquisition unit capable of functioning in a first mode of operation of the device to receive data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determine an identity for the device and store the identity in an identity store of the device; and

a data handling unit capable of functioning in a second mode of operation of the device to handle communications transmitted over the bus and that specify the identity stored in the data store as a destination.

2. A data handling device as claimed in claim 1, wherein the identity acquisition unit is arranged to process the or each data word of a predetermined form in accordance with a look-up table in order to determine the identity for the device.

3. A data handling device as claimed in claim 1, comprising a multiplexing arrangement located between the data bus connectors and the data handling unit and arranged to, in at least the second mode of operation, re-order in accordance with the stored identity data received from at least two of the data lines of the bus and passed to the data handling unit.

4. A data handling device as claimed in claim 3, wherein the multiplexing arrangement is a hardware multiplexing arrangement.

5. A data handling device as claimed in claim 3, wherein the identity acquisition unit is arranged to determine the identity in accordance with a deviation in the order of at least some of the bits of the or each said data word from a standard order, and the

multiplexing arrangement is arranged to re-order the data lines of the bus so as to restore the standard order to the bits as applied to the data handling unit.

6. A data handling device as claimed in claim 1, wherein the device is a data processor.

7. A data handling device as claimed in claim 1, wherein the device is a memory device.

8. A data handling device as claimed in claim 1, wherein the device is defined on an integrated circuit and the data bus connectors are connectors for communicating to and/or from the integrated circuit.

9. A data handling system comprising two or more data handling devices as claimed in claim 1, interconnected by the said data bus.

10. A data handling system as claimed in claim 9, comprising a further device connected to the bus and capable of functioning to transmit the said one or more data words of a predetermined form over the data bus.

11. A data handling system as claimed in claim 10, wherein the further device is capable of triggering the data handling devices to enter the first mode of operation.

12. A data handling system as claimed in claim 10, wherein the data handling devices are arranged to automatically enter the first mode of operation on an initialisation of the system.

13. A method for assigning an identity to a data handling device capable of operating in a system in which two or more devices are connected by a data bus for the transmission of communications therebetween, the data bus having two or more data lines and the device having two or more data bus connectors, each connected to a respective data line of the data bus, the method comprising:

in a first mode of operation of the device, receiving data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determining an identity for the device; and

storing the identity in an identity store of the device.

14. A method as claimed in claim 13, comprising:

in a second mode of operation of the device, handling by means of a data handling unit of the device communications transmitted over the bus and that specify the identity stored in the data store as a destination.